LC Science Tracer Bullet

Science Reference Section, Science, Technology and Business Division Library of Congress, 101 Independence Avenue, S.E., Washington, D.C. 20540-4750

ISSN 0090-5232

BIOGRAPHICAL SOURCES IN THE SCIENCES--LIFE, EARTH AND PHYSICAL SCIENCES (1989-2006)

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TB 06-4 December 2006

SCOPE:

This guide offers a systematic approach to the wide variety of published biographical information on men and women of science in the life, earth and physical sciences, primarily from 1989 to 2006, and complements *TB88-3 (Biographical Sources in the Sciences*, compiled 1988) and *TB06-7 (Biographical Sources in the Sciences -- General Works and National Sources*, compiled 2006). Works previously listed in *TB88-3* have not been retained, but older works which did not make it into the previous bibliography have been included. Both historical and contemporary scientists are covered, with emphasis on Americans. As in *TB88-3*, bibliographic citations include the indication of illustrations, particularly portraits, and the inclusion of preliminary pagination extending to more than 13 pages and unnumbered as well as numbered series notes.

Departing from the usual Tracer Bullet format, where one subject is treated per publication, *Biographical Resources in the Sciences* instead is being issued in three parts, *General Works and National Sources; Life, Earth and Physical Sciences (1989-2006)*; and *Technology and Computer Sciences (1989-2006)*. Each Tracer Bullet contains an introduction to the topic that includes basic works on biography and a general listing of subject headings. This part, *TB06-4* includes Agriculture, Veterinary Medicine Conservation; Astronomy; Biological Sciences; Chemistry; Geology, Mineralogy, Paleontology; Mathematics; Medical Sciences; Physics; Abstracting and Indexing Services; Journals; and Selected Internet Resources.

INTRODUCTION TO THE TOPIC

On Searching for Biographical Information

In seeking biographical information about scientists, one is apt to encounter contrary difficulties, most easily described as "feast or famine." Dozens of book-length biographies may be available for the great figures, such as Newton or Darwin, while little or nothing is ready to hand for less well known or obscure individuals. A few suggestions may be in order for

searchers confronted with the latter situation. Look for journal articles; nowadays, authors' affiliations are usually given, and these can provide a useful starting point. Check membership directories of societies in the scientist's field where varying amounts of biographical information can often be found—at the very least, an address. If the individual is no longer living, a death date will facilitate the search for newspaper obituaries. If only the year of death is known, an obituary may be found by browsing journals and/or society newsletters in the scientist's field. The organization or institution that last employed the scientist may be able to offer advice or assistance. If the location of the person's home at the time of death is known, consider addressing a query to the local library. Many libraries keep clipping files devoted to noteworthy local residents, and may even be able to supply addresses of surviving family members. Published genealogies and local histories can be consulted as well. If the scientist's educational background is known, examination of college and university alumni magazines may produce information; if these are not readily available, one can try contacting the institution's alumni office.

SUBJECT HEADINGS used by the Library of Congress, under which biographical materials on scientists and engineers can be located in most library catalogs, include the following:

Highly Relevant

SCIENTISTS--BIOGRAPHY

SCIENTISTS--BIOGRAPHY--DICTIONARIES

SCIENTISTS--BIOGRAPHY--DIRECTORIES

SCIENTISTS--BIOGRAPHY--INDEXES

See also subdivision "Biography" under headings for groups of scientists, e.g., "African American Mathematicians;" "African American Scientists;" "Women Astronomers;" "Women Scientists;" "Scientists with Disabilities;" "Jewish scientists;" "Catholic scientists;" "Muslim scientists."

SCIENTISTS--UNITED STATES--BIOGRAPHY

See also subdivisions for other countries or geographic areas, e.g., "Scientists--China--Biography;" "Scientists--Biography;" "Scientists--Biography;" "Scientists--Biography;" "Scientists--Biography."

Relevant

MEDICINE--BIOGRAPHY

See also subdivision "Biography" under headings for other scientific disciplines, e.g., "Aeronautics;" "Electronic Data Processing;" "Photography." Note: these headings are used for collective biography only.

PHYSICS--BIO-BIBLIOGRAPHY

See also subdivision "Bio-bibliography" under headings for other scientific disciplines, e.g., "Geology;" "Medicine;" "Science."

ZOOLOGISTS--BIOGRAPHY

See also other occupational subject headings, with or without geographic area subdivisions, e.g., "Anatomists;" "Astronomers;" "Biochemists;" "Biologists;" "Botanists;" "Chemists;" "Computer Engineers;" "Conservationists;" "Earth Scientists;" "Ecologists;" "Engineers;" "Entomologists;" "Environmentalists;" "Geologists;" "Inventors;" "Industrialists;" "Malacologists;" "Mathematicians;" "Meteorologists;" "Microbiologists;" "Mineralogists;" "Molecular Biologists;" "Mycologists;" "Naturalists;" "Oceanographers;" "Ornithologists;" "Paleontologists;" "Physicians;" "Physicists;" "Plant Collectors;" "Psychiatrists;" "Technologists;" "Veterinarians."

Related

SCIENTISTS--ANECDOTES

SCIENTISTS--ANECDOTES, FACETIAE, SATIRE, ETC.

SCIENTISTS--CORRESPONDENCE

SCIENTISTS--CORRESPONDENCE, REMINISCENCES, ETC.

SCIENTISTS--INTERVIEWS

SCIENTISTS--PORTRAITS

See also subdivisions "Anecdotes;" "Anecdotes, Facetiae, Satire, Etc.;" "Correspondence;" "Correspondence, Reminiscences, Etc.;" "Interviews;" and "Portraits" under headings for groups of scientists, e.g., "Engineers;" "Physicists;" "Technologists", with or without geographic area subdivisions.

More General

BIOGRAPHY OBITUARIES

SPECIALIZED TEXTS

Agriculture, Veterinary Medicine, Conservation

Agricultural & veterinary sciences international who's who. 5th ed. Harlow, Essex, Longman Group; New York, Stockton Press, 1994. 1157 p. S415.W45 1994 <SciRR Desk> "... contains details of over 10,800 senior agricultural and veterinary scientists concerned with research from 132 countries." A country and subject index (p. 1125-1157) lists names under professional fields for each of the countries included.

Axelrod, Alan, and Charles Phillips. *The environmentalists: a biographical dictionary from the 17th century to the present*. New York, Facts on File, 1993. xiv, 258 p. illus., ports. Includes bibliographical references. S926.A2A94 1993 <SciRR> Treats organizations as well as individuals.

- Becher, Anne, and others. *American environmental leaders: from colonial times to the present.* Santa Barbara, CA, ABC-CLIO, 2000. 2 v. (xviii, 921 p.) illus. GE55.B43 2000 <SciRR> Includes bibliographical references.
- Biographical dictionary of American and Canadian naturalists and environmentalists. Edited by Keir B. Sterling and others. Westport, CT, Greenwood Press, 1997. xix, 937 p.

 Bibliography: p. 881-890. QH26.B535 1997 <SciRR>
- Braun, Elisabeth. *Portraits in conservation, Eastern and Southern Africa*. Golden, CO, North American Press, 1995. xxxiii, 268 p. illus., maps, ports. QL26.B73 1995 Bibliography: p. 257-262.

"Each conservationist is striving to find a balanced and interactive relationship among people, wildlife, and the environment."

- Breton, Mary Joy. *Women pioneers for the environment*. Boston, Northeastern University Press, 1998. xiv, 322 p. illus. GE55.B74 1998 <SciRR> Bibliography: p. 305-309.
- Drum, Sue, and H. Ellen Whiteley. *Women in veterinary medicine: profiles of success.* Ames, Iowa State University Press, 1991. xv, 270 p. ports. SF612.D78 1991 Biographies of 20 women.
- Environmental activists. Edited by John Mongillo and Bibi Booth. Westport, CT, Greenwood Press, 2001. 356 p. illus. GE55.E57 2000 <SciRR> Includes bibliographical references.
- Holmes, Madelyn. American women conservationists: twelve profiles. Jefferson, NC, McFarland, 2004. 202 p. illus. QH26.H66 2004

 "List of published writings of twelve women conservationists," p. 191-197.

 Mary Austin -- Florence Merriam Bailey -- Rosalie Edge -- Marjory Stoneman Douglas -- Helen Nearing -- Rachel Carson -- Contemporary women conservationists: Faith McNulty, Ann Zwinger, Sue Hubbell, Anne Labastille, Mollie Beattie, and Terry Tempest Williams -- Conclusion, ideas for our time.
- Marczakiewicz, August, and Jan Stępiński. *Słownik biograficzny działaczy kółek rolniczych*. Warszawa, Krajowy Związek Rolników, Kółek i Organizacji Rolniczych, Komisja Historyczna, 1992. 157 p. ports. S415.M26 1992
- Muhm, Don, and Virginia Wadsley. *Iowans who made a difference: 150 years of agricultural progress.* West Des Moines, Iowa Farm Bureau Federation, 1996. xvi, 367 p. illus., ports. Bibliography: p. 361-367. S415.M84 1996

- Our history of women in veterinary medicine: gumption, grace, grit, and good humor. By the Association for Women Veterinarians; compiled and edited by Phyllis Hickney Larsen. Littleton, CO, The Association, 1997. 115 p. illus. SF612.O87 1997 Bibliography: p. 105-109.
- The Prairie practitioners: 20th century South Dakota veterinarians. Compiled and edited by Thomas B. Ludgate and Janice Ludgate Kitzler. Freeman, SD, Pine Hill Press, 1996. 288 p. illus. SF612.P73 1996
- Scheuering, Rachel White. *Shapers of the great debate on conservation: a biographical dictionary.* Westport, CT, Greenwood Press, 2004. xxviii, 312 p. (Shapers of the great American debates) S926.A2S36 2004 Bibliography: p. 305-306.
- Stalheim, Ole H. V. *Veterinary conversations with mid-twentieth century leaders*. Ames, Iowa State University Press, 1996. xxvi, 302 p. illus., ports. SF612.S83 1996 "Bibliographic Essay": p. 299-302. Interviews with "28 innovators who led parts of the prodigious expansion of veterinary medicine in the 20th century."
- Who's who of the environment. In *The Environment encyclopedia and directory*. 4th ed. London, Europa Publications Limited, 2005. p. 499-599. GE10.E57 2005 <SciRR>
- World who is who and does what in environment & conservation. Edited by Nicholas Polunin; compiled by Lynn M. Curme. New York, St. Martin's Press; Geneva, Foundation for Environmental Conservation, 1997. 592 p. GE55.W67 1997 <SciRR> Supplementing the biographies is an appendix providing names and brief information arranged by country, and another with listings of names under very narrow specialties.

Astronomy

Bhathal, R. S. *Australian astronomers: achievements at the frontiers of astronomy*. Canberra, National Library of Australia, 1996. 236 p. illus., ports. QB35.B48 1996 Bibliography: p. 229-232.

Interviews with 18 astronomers.

Bònoli, Fabrizio, and Daniela Piliarvu. *I lettori di astronomia presso lo studio di Bologna dal XII al XX secolo*. Bologna, CLUEB, 2001. 282 p. illus. (Musei e archivi dello Studio bolognese, 7) QB35.B66 2001

Bibliography: p. 267-272.

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Brüggenthies, Wilhelm, and Wolfgang R. Dick. *Biographischer Index der Astronomie*. Frankfurt am Main, H. Deutsch, 2005. 481 p. (Acta historica astronomiae, v. 26)

Alternative title: *Biographical index of astronomy*. OB35.B845 2005

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- Krishnamurthi, K. R. *Indian astronomers*. General editor, N. Mahalingam. Madras, International Society for the Investigation of Ancient Civilizations, 1991. 213 p. Short sketches of ancient Hindu astronomers. QB35.K65 1991
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- McCutcheon, Scott, and Bobbi McCutcheon. *Space and astronomy: the people behind the science*. Chelsea House, New York, 2006. xvi, 192 p. illus. (Pioneers in science)
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- Mourão, Ronaldo Rogério de Freitas. *Astronomia na época dos descobrimentos: a importância dos árabes e dos judeus nas descobertas*. Rio de Janeiro, Brazil, Lacerda Editores, 2000. 486 p. illus. VK549.M68 2000

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Biological Sciences

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- Bridson, Gavin D. R. Biographies of naturalists. In his *The history of natural history, an annotated bibliography*. New York, Garland Pub., 1994. p. 20-154. (Garland reference library of the humanities, v. 991) (Bibliographies on the history of science and technology, v. 24)

 Z7405.H6B75 1994 <SciRR>
 Contents Section Ba: Collected biographies. Naturalists; Botanists (& plant collectors); Zoologists (& anatomists); Artists (& illustrators); Portraiture--Individual biographies
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"Appendix I: Scientists by field": p. 413-415.

Includes bibliographical references.

QH26.N68 1996 <SciRR>

"Appendix II: Scientists by awards received": p. 417-424.

Nowak, Eugeniusz. Wissenschaftler in turbulenten Zeiten: Erinnerungen an Ornithologen, Naturschützer und andere Naturkundler. Schwerin, Stock & Stein, 2005. 432 p. illus. Bibliography: p. 407-417. QH26.N69 2005

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Voous, K. H. *In de ban van vogels: geschiedenis van de beoefening van de ornithologie in Nederland in de twintigste eeuw. Tevens ornithologisch biographisch woordenboek.* Utrecht, Scheffers, 1995. 605 p. illus., ports. QL26.V66 1995

Includes bibliographical references.

A lengthy introduction on the development of ornithology in the Netherlands in the 20th century is followed by 550 biographical sketches and a list of the names arranged by date of birth.

Wasserman, Elga. *The door in the dream: conversations with eminent women in science.*Washington, Joseph Henry Press, 2000. xiv, 254 p. illus. QH26.W375 2000
Includes bibliographical references.

Women in the biological sciences: a biobibliographic sourcebook. Edited by Louise S. Grinstein, Carol A. Biermann, and Rose K. Rose. Westport, CT, Greenwood Press, 1997. xxii, 609 p. QH26.W66 1997 <SciRR>

Short essays for each of 655 women discuss her life and work and cite writings by and about her.

Appendices list the women in chronological order and by place of birth, place of work, and field of scientific interest, and cite references in biographical dictionaries and other collections.

Yount, Lisa. *A to Z of biologists*. New York, Facts on File, 2003. 390 p. illus. (Notable scientists)

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Chemistry

American chemists and chemical engineers. Wyndham D. Miles, editor. Washington, American Chemical Society, 1976 - < 1994 > 2 v. QD21.A43 < SciRR >

Includes bibliographical references.

Volume 2 edited by Wyndham D. Miles, Robert F. Gould; published Guilford, CT, Gould Books, 1994.

Beyer, Lothar, and Rainer Behrends. *De artes chemiae: Chemiker und Chemie an der Alma mater Lipsiensis: Kunstschätze, Buchbestände und Archivdokumente der Universität Leipzig und anderer Sammlungen.* Leipzig, Passage-Verlag, 2003. 223 p. illus. (some col.)

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America, History and Life (1964-) Z1236.A48, Z1236.A484, Z1236.A485, Z1236.A486, Z1236.A488 and Z1236.A487 <MRR Alc> and Electronic format

Applied Science & Technology Index (1913-) Z7913.I7 <SciRR A&I> and Electronic format

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Bibliography and Index of Geology (1933-)

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Biography and Genealogy Master Index (1975-)

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Biological and Agricultural Index (1916-)

Z5073.A46 <SciRR A&I> and Electronic Format

Chemical Abstracts (1907-)

QD1.A51 <SciRR A&I>

Current Biography (1940-)

CT100.C8 <MRR Biog> <BRS Biog> and Electronic format

Engineering Index (1884-)

Z5851.E62 <SciRR A&I> and Electronic format

General Science Index (1978-)

Z7401.G46 and Electronic Format

Historical Abstracts (1955-)

D299.H5, D299.H512, and D299.H513 <MRR> and Electronic format

Mathematical Reviews (1940-)

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New York Times Index (1913-)

AI21.N44 and AI21.N45 <MRR>

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Readers' Guide to Periodical Literature (1900-)

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Wellcome Bibliography for the History of Medicine (2000-)

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URL: http://library.wellcome.ac.uk/node60.html

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African American Biographical Database

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Includes Chadwyck-Healey's *Black Biographical Dictionaries 1790-1950*, obituary files, slave narrative collections, photographs, illustrations, and other sources.

American National Biography
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Portraits of more than 17,400 men and women from all areas and walks of life whose lives have shaped the nation.

Biography Resource Center

Electronic format

Database of biographical information on more than 150,000 individuals from all parts of the world. The information is taken from standard biographical resources, many of which are also available in print format in the Library.

Chambers Reference Online

CT103.C4 <MRR Biog> and Electronic format

Contains Chambers Biographical Dictionary (1997 ed. with amendments)

German Biography

Electronic format

Elektronische Allgemeine deutsche Biographie (E-ADB and E-NDB) is a database for German biographies.

JSTOR Arts & Sciences I, II III, and Health & General Science Electronic format JSTOR is a collection of full-text, keyword-searchable academic journals dating back to the late 17th century.

Oxford Dictionary of National Biography

DA28.O95 2004 <MRR Biog> and Electronic format An illustrated collection of 50,000 specially written biographies of the men and women who

shaped Britain's past.

Proquest Historical Newspapers

Electronic format

World Biographical Information System

Electronic format

Current component indexes and archives include the following, with more added yearly: American Biographical Archive (ABA Series I and II); Biographical Archive (ABEP Series I and II); Biographical Archive of the Benelux Countries/Archives biographiques des pays du Benelux (BAB I); British Biographical Archive (BBA Series I and II); Archives biographiques françaises /French Biographical Archive (ABF Series I and II); Deutsches biographisches Archiv/German Biographical Archive (DBA Series I and II); Archivio biografico italiano/Italian Biographical Archive (ABI Series I and II); Russisches biographisches Archiv/Russian Biographical Archive (RBA); Scandinavian Biographical Archive (SBA I); and Archivo biográfico de España, Portugal e Iberoamérica/Spanish, Portuguese and Latin-American Archive (ABEP Series I and II).

Xreferplus: Biography

Electronic format

Component sources include *Debrett's Peerage and Baronetage, Debrett's People of Today, Macmillan Dictionary of Women's Biography, Penguin Biographical Dictionary of Women, Who's Who 2003, Who's Who in Ancient Egypt, Who's Who in Christianity, Who's Who in Gay and Lesbian History, and Who's Who in The Roman World.*

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Agricultural History S1.A16
American Heritage of Invention & Technology T1.A455
American Scientist LJ85.S502
British Journal for the History of Science Q125.B77
Bulletin of the History of Medicine R11.B93
Historia Mathematica QA21.H54
Historical Studies in the Physical and Biological Sciences QC7.H69
History of Science Q125.H63

History of Technology T14.7.H57

Industrial Archaeology T37.I5

Isis Q1.I7

Journal of Chemical Education QD1.J93

Journal of Medical Biography R134.K33

Journal of the History of Ideas B1.J75

Journal of the History of Medicine and Allied Sciences R131.A1J6

National Academy of Sciences. Biographical Memoirs Q141 .N2

Osiris Q1.07

Proceedings of the American Philosophical Society Q11.P5

Science Q1.S35

Scientific American T1.S5

Scientific Monthly Q1.S817

Studies in History and Philosophy of Science Q125.S94

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The Internet offers a growing number of sources that provide information on scientists in virtually every scientific discipline. Use your favorite search engine and the name of the individual or terms such as those provided in the section on subject headings at the beginning of this compilation. Some Internet addresses that may be of interest include:

Biographies of Women Mathematicians

URL: http://www.scottlan.edu/lriddle/women/women.htm

The Bruce Medalists (astronomy)

URL: http://yorty.sonoma.edu/BruceMedalists/index.html

Chemical Heritage Foundation: Chemical Achievers

URL: http://www.chemheritage.org/classroom/chemach/index.html

Contains biographical, scientific, and pictorial material about famous chemists.

History of Astronomy: Persons

URL: http://www.astro.uni-bonn.de/~pbrosche/hist_astr/ha_pers.html

See also "Finding List of Obituaries of Astronomers (1900-1997) and list of other sources.

The History of Chemistry

URL: http://www.woodrow.org/teachers/ci/1992/

History of Geology Resources on the Web: a Selection by the History of Geology Group (HOGG)

URL: http://www.geolsoc.org.uk/template.cfm?name=HOGG links

Includes links to geological organizations and online biographies of earth scientists.

The MacTutor History of Mathematics Archive

URL: http://www-groups.dcs.st-and.ac.uk:80/~history/

Mathematicians of the African Diaspora

URL: http://www.math.buffalo.edu/mad/mad0.html

Natural History and Biology in the Nineteenth Century: A Bibliography

URL: http://www.hps.cam.ac.uk/research/nhbnc.html

Prizes Named After People

URL: http://www.answers.com/topic/prizes-named-after-people

Science Subject Guide: Biography, History of Science

URL: http://www.loc.gov/rr/scitech/subjectguides/biographysg.html

Scripps Institute of Oceanography Archives

URL: http://scilib.ucsd.edu/sio/archives/

WWW Virtual Library: Chemistry

URL: http://www.liv.ac.uk/Chemistry/Links/refhistory.html

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